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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,134	09/19/2002	David Parrillo	112208-2	9800
23413	7590	06/28/2004	EXAMINER	
CANTOR COLBURN, LLP			BROWN, JENNINE M	
55 GRIFFIN ROAD SOUTH			ART UNIT	
BLOOMFIELD, CT 06002			PAPER NUMBER	

1755

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,134

Applicant(s)

PARRILLO ET AL.

Examiner

Jennine M. Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 14-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-13 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 04/29/04; 02/14/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Election/Restrictions

Applicant's election of Group I, claims 1-13 in the reply filed on 04/18/2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Regarding the election of species, based on Applicants arguments of undue burden and upon further consideration, the species can be considered functional equivalents, therefore any species would be an obvious variant, therefore the species requirement is withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, particularly the recitation of the limitation "a catalyst made from the catalyst precursor composition of claim 1" in claim 11. There is insufficient antecedent basis for this limitation in the claim. Claim 1 is drawn to a catalyst precursor, not a catalyst. Furthermore the catalyst claims give no further structure between said catalyst composition and said catalyst precursor composition. Claims 12 and 13 depend from claim 12 and carry the same antecedent basis problems as claim 11. Claim 12 has an antecedent basis problem because it claims "a bimodal

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distribution of pores less than 400 Angstroms" but claim 11 claims no pores. Therefore, claims 11-13 do not further limit claim 1 and are considered improper.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5-6, 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Ong (US 5874374 A).

Ong discloses a metal oxide catalyst precursor and composition comprising a pore former (e.g. cellulose, starch, polyethylene glycol, ethylene oxide; col. 3, l. 17-29) and catalyst reagent (chlorides, carbonates, hydroxides, isopropoxides, nitrates, acetates, epoxides, oxalates and mixtures of metal cation salts from groups IA, IIA, IIIA, IVA, VA, VIA, IB, IIB, IIIB, IVB, VB, VIB, VIIB and VIII; col. 3, l. 30-40) used to make a catalyst (col. 1, l. 27-32). Example I uses a hydrated ferric nitrate salt and polyethylene glycol and heating to 500 °C to make a film or granules (col. 3, l. 50 – col. 4, l. 7). Example II discloses porous ceramics produced by pyrolyzing an organic perform such as polyethylene glycol (col. 4, l. 10 – col. 5, l. 22).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 4, 7, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ong (US 5874374 A).

Ong discloses a metal oxide catalyst precursor composition comprising a pore former and catalyst reagent supra.

Although Ong does not expressly state all possible Markush groups such as magnesium nitrate, it is an obvious variation given by applicants based on the metal cation salts given in column 3, lines 31-40. Although Ong does not specifically state polyethylene wax, it would be an obvious variation of a homopolymer of ethylene oxide. Subgenres of the chemical composition are described with enough specificity that one of ordinary skill in the art would envisage the species within each subgenus. *In re Petering*, 33 USPQ 275 (CCPA 1962), *In re Schaumann*, 197 USPQ 5 (CCPA 1978).

Although Ong does not expressly state that there is a bimodal distribution of pores or the size of the pores formed by the pore former, the reference does state that

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their embodiment "allows for the preparation of a wide range of materials with predesigned pore structures. Porous materials such as papers, fabrics, threads, foams or monoliths, whether natural or synthetic, having random or ordered structure, can all be replicated by impregnating them with the metal cation/polymer solution which is subsequently converted to an oxide phase." (col. 4, l. 40-56) It would have been obvious to one of ordinary skill in the art to determine the size of the pore needed, whether or not to have a bimodal pore structure and choose a the pore former that will produce the appropriate structure because pore structure can be predesigned and replicated.

Claim Objections

Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Prior art of record fails to use the pore former in the suggested percentages of claim 2.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennine M. Brown whose telephone number is (571) 272-1364. The examiner can normally be reached on M-F 8:00 AM - 6:00 PM; first Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on (571) 272-1700. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jmb



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